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L'étude vise à évaluer l'efficacité d'un programme d'immersion française mis sur pied en 1969-1970 et destiné à des élèves anglophones de septième année. Dans ce but, les performances scolaires (anglais, français et mathématiques) et les préjugés ethniques d'un échantillon d'élèves inscrits en 1971-1972 dans des classes d'immersion ont été comparés à ceux de groupes de contrôle: élèves suivant l'enseignement régulier en anglais, élèves francophones.

Les 159 élèves de la région montréalaise qui se sont prêtés à l'enquête étaient répartis en quatre groupes: immersion totale (43), immersion partielle (44), groupes témoins anglais (41) et français (31). Les prétests ont eu lieu en novembre 1971 et les post-tests en juin 1972. Les instruments d'enquête utilisés comprenaient des extraits du "Stanford achievement test", le Test de rendement en français de la CECM, un test d'expression orale française, enfin une échelle sémantique et un questionnaire visant à déterminer les attitudes ethniques des élèves et leur perception des francophones.

Les résultats indiquent que les élèves des classes d'immersion ont effectué des progrès importants en langue française, et cela sans que leurs résultats en anglais et en mathématiques en soient affectés. Aucun changement quant aux attitudes ethniques n'a été relevé par rapport au groupe de contrôle anglophone. Le programme d'immersion dans sa forme apparaît satisfaisant; il reste toutefois à en mesurer les effets à long terme.

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THE PROTESTANT SCHOOL BOARD OF GREATER MONTREAL

Report on the Evaluation of the Grade Seven French Immersion Programme 1971 - 1972

April 1973.

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THE PORTESTANT SCHOOL BOARD OF GREATER MONTREAL

STUDENT PERSONNEL SERVICES
AND
CURRICULUM DEPARTMENTS

1971-72 GRADE SEVEN FRENCH IMMERSION EVALUATION PROJECT

Introduction:

The success of the French Immersion Program involving a home-school language switch at the lower elementary level in St. Lambert has been well documented in the literature in a longitudinal study my members of the McGill Language Research Team. Our Board introduced an experimental program of this type in 1969 at the request of parents unwilling to enroll their children in French schools although strongly intent on having them educated in French in their own cultural setting. At the same time, to provide a viable alternative to students enrolled at the upper elementary school level, a similar-type program was offered to grade seven students of good academic standing.

The primary objective of the grade seven program was to expose the student to an enriched, language-learning situation with partial follow-through through high school with the intention of producing a functionally bilingual person. This does not mean that the student would necessarily feel equally at ease in

both languages or cultures by the end of high school, although by this time he would be expected to function smoothly and efficiently in French and possess the linguistic skills to further his expertise in the second language on his own initiative as he so desired. All this, of course, with relative ease and comfort and with no loss to or disruption of his English skills.

The grade seven program has been offered every year since then and the first group of students is now enrolled in grade ten. An experimental assessment of the grade seven level in the 1970-71 school year produced results favorable to the immersion program but was limited in the sense that only bright students were available for investigation because of stringent admission standards to the course. In the 1971-72 school year it was possible to assess students on a wide range of ability as the admission standards had been lowered considerably. This yields a greater fund of information for the overall effects of the course at various ability levels but the full effects can be assessed only on a longitudinal basis when the students will have completed their learning cycle by the end of grade ten. A report on the evaluation of the first group of grade seven students currently in grade ten is scheduled for June '73.

Description of the Population:

The population from which our samples were obtained consists of four basic groups. The first, the Total Immersion Group, involves students in schools organized exclusively as grade seven immersion schools in which French only was adopted as the language of expression. These include Cartierville, Elmgrove and Royal Vale. The second, the Partial Immersion Group, involves immersion students in schools in which most of the students were in the regular English stream. These schools include Dorval Gardens, Nesbitt, Riverdale and Riverview. The third, the English Control Group, involves English students in the regular stream from nine schools each of which was the most representative school from its sector either feeding into the immersion course or housing a large number of grade seven students. These schools include Algonquin, Dunrae Gardens, Herbert Symonds, Iona, Lachine High School, Nesbitt, Riverdale, Westminster and Woodland. The fourth, the French Control Group, involves students from the French schools in our system. These schools, Maisonneuve, Peace Centennial and Victoria, cover a wide range of cultural backgrounds and socio-economic levels and represent our French-speaking population.

Description of the Sampling Technique:

As in our previous study, students who showed evidence

of an organic or speech impediment were excluded from candidacy to this project. Only those English students with grade-six Lorge-Thorndike IQ's in their Kardex files were considered as potential candidates. The only test available for selecting the French candidates was the Otis-Ottawa administered in grade six. This test is primarily a measure of scholaptitude but was accepted as an adequate instrument for equating the treatment groups because it correlates highly with standardized group IQ tests.

Individual samples were obtained for both treatment program and sex by selecting at random along eight IQ levels ranging from a low of 80 to 90 to a high of 121 to 130, thus providing distributions similar to that of the Board. An additional selection factor involved the selection of a proportional representation of students from each school such that the composition of each sample was designed to reflect the composition of the students in each treatment program. The obtained samples were highly comparable except for a smaller standard deviation on the distribution of scores of the French Control Group whose population provided a restricted number of subjects for selection purposes.

Results of the Sampling Technique:

In the initial planning stages, the above samples were

constructed to obtain normal distributions for each combination of treatment program and sex. At a later stage, it was decided to re-stratify these groups according to three IQ levels, the first ranging from 116 to 130, the second from 96 to 115, and the third from 80 to 95. Table I reveals that the obtained distributions yielded a larger number of students in the middle level. This is partially explained by the fact that the middle level of a normal distribution contains more subjects and partially by the fact that the middle level was designed to contain the widest range of scores.

The degree of variability among the means at each IQ level is small and there is a marked significant difference among the three levels (Table II). This makes for samples which adequately represent the populations from which they were extracted and provides comparable groups for comparative purposes.

Tests Selected for the Battery:

In the first part of the French Speaking Skills Test, the students were requested to tape-record their answers to a series of oral questions and their conversation with an examiner. In the second part they were requested to record their oral descriptions of the gist of a story suggested by each of five cartoons.

The oral questions were designed by the examiner using

a model developed by Beardsmore and Renkin. This model is meant to test basic skills such as "the manipulation of numbers and dates...the correct use of verbs...the ability to provide personal factual information...the ability to agree with a speaker using the basic tenses of regular and irregular verbs...the ability to express disagreement with a speaker...the ability to put a question to a speaker...the ability to indicate comprehension of a sequence of events or the relationship between a cause and an effect...the use of the simple past tense of irregular verbs and the natural use of pronouns in dialogue...the correct use of the conditional ...the correct use of the perfect conditional."[1] These questions were incorporated into the test to provide additional information of potential diagnostic value.

The oral responses of the students on these tests were rated by specialists using a five-point scale for each of the following six dimensions: comprehension in conversation; grammatical correctness; enunciation; rhythm and intonation; vocabulary; fluency. The ratings of the two French specialists were then combined into a single score for each student on each dimension.

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1. Beardsmore and Renkin, "A Test of Spoken English," International Review of Applied Linguistics, p. 1-11.

The rating on Comprehension refers strictly to the understanding of the content of a conversation and was set up in terms of the following criteria for scoring purposes: (5) understands fully; (4) needs repetition of questions to understand; (3) needs rephrasing of questions to understand; (2) needs some translation into English to understand; (1) understands in English only.

The rating on Grammatical Correctness was set up in terms of the following criteria: (5) no errors, effortless use of grammar or word order; (4) meaning not obscured with one or two errors; (3) frequent errors, meaning occasionally obscured; (2) definitely unsatisfactory usage, speech frequently obscured; (1) virtually no structure, speech very difficult to understand.

The rating on Enunciation was set up in terms of the following criteria: (5) relatively great muscular tension, proper voicing and devoicing; (4) less muscular tension; (3) understandable mispronunciation; (2) less understandable mispronunciation; (1) intensified, almost incomprehensible utterances.

The rating on Rhythm and Intonation was set up in terms of the following criteria: (5) good final contours and wide, pitch range, beats well paced; (4) less pitch variation; (3) occasional, inappropriate, rising final contours; (2) rising contours, uneven and uncertain pitch variation; (1) no final contours.

The rating on Vocabulary was set up in terms of the following criteria: (5) approximates that of a French-speaking person; (4) rare trouble, good on subjects within his experience; (3) inappropriate terms and/or roundabout language; (2) frequent use of wrong words, communication impaired; (1) misuse of words, limited vocabulary, difficult to understand.

The rating on Fluency was set up in terms of the following criteria: (5) approximates that of a French-speaking person; (4) tempo and rapidity of responses slightly affected; (3) fluency visibly affected by interference from native tongue; (2) rapidity, tempo and length of utterances greatly affected; (1) fluency so far from normal as to make conversation impaired.

The grade seven level of the Test de Rendement en Français of the Commission des Ecoles Catholiques de Montreal was administered to the students to obtain an assessment of their performance on a standardized, written French test. The test contains a series of forty questions which deal with the following areas: spelling, word relevance, synonyms, antonyms, the functions of words in sentences, gender, and verb tenses. This test is the best of its kind available because of its rugged, scientific construction and a huge sample with local norms.

Though the CECM combines this test with a classroom evaluation to form a composite score for which norms are available, doubling the score of this one test provides a rough

estimate of the composite score. This latter procedure was followed here since a composite score using the CECM methodoly cannot be computed in our system at the present time.

The Paragraph Meaning, the Language Usage, and the Arithmetic Concepts of the Stanford Achievement Test were selected as measures of achievement in English and Mathematics. Alternate forms of this standardized, objective test were used for pre- and post-test rounds.

The Stanford manual describes the Paragraph Meaning as consisting "of a series of paragraphs graduated in difficulty" ...to provide..."a functional measure of the pupil's ability to comprehend connected discourse involving levels of comprehension ranging from extremely simple recognition to the making of inferences from what is stated in several related sentences." It describes the Language Usage as a sub-test which "samples...correct verb usage, the use of pronouns and adjectives, choice of words, double negatives, and substandard corruptions."[2] The Arithmetic Concepts measures the understanding of a wide range of mathematical properties.

The Semantic Differential was used as the measure of attitudes which students expressed towards themselves and

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2. Kelly et al., Stanford Achievement Test, Directions for Administering, p. 4.

selected ethnic groups. The students were requested to rate each of the concepts Myself, English Canadians, French Canadians, and European French against twelve, graduated, seven-point scales which were selected on the basis of their having been the only ones to yield significant differences in the previous evaluation.

Similarly, part of a questionnaire on a series of statements on French Canadians prepared by McGill specialists was also administered to the students to provide an additional check on the extent to which student participation in a one-year French Immersion project might reflect changes in attitudes towards various ethnic groups.

Test Dates and Conditions of Administration:

Most of the pre-testing was completed in the last two weeks of November '71 although the CECM test was administered in December becasue it was not possible to obtain authorization for its use from the Department of Education in Quebec before that time. The post-test results were obtained in the first two weeks of June '72.

Since all of the testing was completed in the individual schools which the students attended, the test groups were small, easily manageable, and highly cooperative.

Description of the Treatment of the Results:

This report presents two types of tables for the analysis of the results on each of the IQ and performance tests. The first presents the means of the groups identified along four factors. These are: date tested, pre and post; type of treatment program; sex; IQ. The second presents a four-way analysis of variance (ANOVA) on these factors: an unweighted-means analysis was used in the computational procedure.

All of the groups were tested for IQ. Both immersion streams were tested on all performance tests. The English Control Group was tested on the English tests and the French Control Group on the French tests. All groups were compared on IQ. The immersion groups were compared to the English Controls on the English tests and to the French Controls on the French tests.

The French Controls were not included in the measures on the attitudinal data such that only the immersion streams and the English Controls were compared on them.

Analysis and Interpretation of Results:

French Oral Skills:

The most conspicuous feature of the tests on the French Speaking Skills centers around the extremely high per-

performance of all the IQ levels of the French Controls on all of the dimensions. This was so as most of the students had already acquired mastery of their mother tongue; it serves, nevertheless, as a guage to assess the standing of their immersion counterparts.

The next most conspicuous feature involves the factors on which a significant difference was obtained. All of the sub-tests yield significant differences for dates tested and for the treatment program. This means, of course, that significant gains were obtained between test sessions by the immersion students but not by the French Controls as their scores were already near the maximal rating on pre-test results. The absence of significant differences for sex and IQ implies that these factors did not operate differentially in the gains recorded.

A closer scrutiny of the data on each rating dimension further confirms these observations. For the Total Immersion Group, the post-test results on the Comprehension sub-test (Tables III and IV) over all IQ levels reveal means clustering unifromly around a rating of 4. A similar pattern of results was obtained by the Partial Immersion Group whose larger range of means does not reveal any direct relationship with either sex or IQ.

The post-test data on the Grammar sub-test (Tables V

and VI) yield roughly the same observations. The performance of the lowest IQ level of the girls in the Partial Immersion Group equals that of the highest IQ level for both sexes in the Total Immersion Group. Sex differences favor the males slightly in the Total Immersion Group but theyfavor the females much more so in the Partial Immersion Group.

The post-test data on the Enunciation sub-test (Tables VII and VIII) reveal one clear trend: the results vary directly with IQ only for the males in the Total Immersion Group. Otherwise, the sex and IQ differences are not significant: they are, to the contrary, quite diffuse.

For the Total Immersion Group, the post-test data on the Rhythm and Intonation sub-test (Tables IX and X) reveal undifferentiated results for sex and IQ. Those of the Partial Immersion Group do not vary consistently with IQ although they do reveal slightly higher scores for the females in the two lower IQ levels.

For the males of both immersion streams, the post-test results on the Vocabulary sub-test (Tables XI and XII) vary directly with IQ. For the females of both streams, the lowest scores were obtained by the groups of average ability whereas equal means were obtained by the high- and low-level IQ groups.

There were no sex differences for the highest IQ level although the results tend to favor the females slightly for the lower two levels.

For the post-test data on the Fluency sub-test (Tables XIII and XIV), a direct relationship was obtained with IQ level for both sexes of the Total Immersion Group and for the males of the Partial Immersion Group, whereas an inverse relationship with IQ level was obtained for the females in the Partial Immersion Group. No clear-cut pattern was obtained for the sex differences across both streams.

French Written Skills:

The results on the CECM Test de Rendement en Français (Tables XV and XVI) yield significant and dramatic differences between the immersion streams and the French Controls. The pre-test results of the French Controls fall at a stanine of 5 for all IQ levels and sexes with the exception of the females in the lowest IQ level who scored at a stanine of 4. These are average scores for the CECM November norms and suggest that our population is very much like theirs in this respect. The high performance of the French Controls on the June post-test was due to their comparision with CECM population on November norms.

The pre-post test results on the Test de Rendement en Français yielded significant differences for all treatment

groups. In general, the males in the immersion streams raised their performance from a stanine of 2 to a stanine of 3 whereas the females tended to remain at a stanine of 2. Even though these increases were significant in terms of raw scores, the post-test means still place most of the sub-groups in the bottom quartile of the CECM norms.

Unlike the results on the speaking skills, the direct relationship between IQ level and performance on the Test de Rendement en Français is striking and consistent. The differences between the sexes of all treatment groups are somewhat undifferentiated as also are the differences between the immersion streams.

English Written Skills:

The post-test results on the Paragraph Meaning sub-test (Tables XVIIand XVIII) yielded significant differences for pre-post test results and sex. The direct variation of performance with IQ level is strikingly evident for both sexes across all treatment groups and indicates that level of intellectual endowment has contributed significantly to their achievement in this area.

IQ level was the only factor on which significant differences were obtained on the Language Usage sub-test (Tables XIX and XX). This was the only test in the whole battery which

did not yield a significant gain in results between tests.

Mathematics Skills:

The post-test data on the Arithmetic Concepts subtest (Tables XXI and XXII) yielded significant differences for the pre-post testing factor, sex, and IQ. This was in keeping with expectations. The fact that no significant group differences favoring the English Controls were observed lends encouraging support to the fact that the Board immersion programs at this level sustain the development of the students in this area of the curriculum.

Attitudinal Measures:

As measured by the Semantic Differential, the results on the concept "Myself," (Tables XXIII and XXIV), reveal that the immersion students tend to see themselves in a better light than do the English Controls. They rate themselves as stronger, more successful, happier and more interesting on pre-testing and as stronger, happier and more interesting on post-testing.

The ratings on the concept "English Canadians" (Tables XXV and XXVI) yielded significant differences on each of three different traits for each of the test rounds. In all cases except one, both immersion streams gave more favorable ratings than did the English Controls.

A relatively smaller number of significant differences was obtained on the concept "French Canadians" (Tables XXVII and XXVIII), two on the first round of testing and a different third on the second. The Partial Immersion Group gave the highest mean rating in each of the three cases.

Only two significant differences were obtained on the concept "European French" (Tables XXIX and XXX), one on pre-testing and one on post-testing. Here too the Partial Immersion Group gave the most favorable rating on both traits.

The Questionnaire on the French Canadians (Tables XXXI and XXXII) yielded only one significant difference among the treatment groups and this on the pre-test statement on the value of French Canadian playmates for English children. Typically, the highest rating was given by the Partial Immersion Group and the lowest by the English Controls. Otherwise, the ratings given to the remaining statements were generally diffuse and did not differentiate among the treatment groups.

Conclusions and Recommendations:

Though the immersion groups were still somewhat behind their French Canadian counterparts on the post-test data of the oral skills, their significant gains between test sessions reveal that they have acquired a considerable amount of

skill on the dimesnions selected for evaluation. This leaves no doubt regarding their progress during the six-month interval under consideration.

In general, the absence of significant differences for sex and IQ suggests that these were unimportant factors in determining the rate and level of achievement of the immersion students on the oral skills. A visual examination of the results in addition to their statistical values reveals that the distributions of the means are diffuse and undifferentiated when compared for IQ level and sex.

On the other hand, the data on the French written skills reveal that IQ level did make an important contribution to the performance of the students in this area. Though the results of the immersion groups place them in the bottom quartile of the CECM norms, this standing has not been treated too seriously as the mastery of the written language takes much longer to acquire and as the accent in the course is placed especially on the acquisition of oral skills.

The data on the English written skills also reveal that the IQ factor played an important part in the achievement of all treatment groups and that participation in the French Immersion Program has not resulted in any deleterious effects to the native English skills of the immersion students.

The experimental data reveal that teaching the immersion students mathematics in the French language has not been detrimental in any way to their achievement in this area.

The results on the attitudinal data reveal that no significant shifts in attitudes towards selected ethnocentric groups could be detected as a by-product of participation in the French Immersion Program.

Though the results obtained in this evaluation have a lot to say for the effectiveness and the success of the 1971-72 French Immersion Program, it should be borne in mind that this program extends into high school and that the development of self-confidence and spontaneity in self-expression in the second language were the key-notes of the course. The importance of accuracy in self-expression, though not relegated to secondary importance, may not have been stressed to the extent that one would expect in a traditional French as a Second Language course. It is hoped that the development of sound motivations and attitudes in an enriched, spontaneous setting will provide the student with sufficient incentive to seek the expertise and mastery of the language to the extent to which he is capable without the inhibitions to second-language learning characteristic of the traditional programs.

The results obtained in this evaluation suggest no

reason why the immersion course should be modified to cater to any specific second-language, oral-learning requirements for lower-level IQ students who, relatively speaking, may have been the ones to benefit most from the immersion course in this respect.

Table I

IQ SCORES AND NUMBER OF STUDENTS PER GROUP, LEVEL AND SEX

Level	Sex	Total Immersion		Partial Immersion		English Canadian Controls		French Canadian Controls	
		IQ	N	IQ	N	IQ	N	IQ	N
I	Male	121.40	5	123.20	5	119.80	5	126.00	3
	Female	122.60	5	122.20	5	123.40	5	121.00	2
II	Male	105.36	11	104.58	12	105.82	11	106.29	7
	Female	105.50	12	106.82	11	105.99	13	105.80	10
III	Male	88.00	5	89.80	5	90.67	3	88.50	4
	Female	91.60	5	90.17	6	87.00	4	89.40	5

Table II

THREE-WAY ANOVA ON THE IQ SCORES

Source of Variation	df (Num)	SS	MS	F
Group: Type of program	3	14.00	4.66	0.14
Sex	1	0.95	0.95	0.29
IQ	2	22903.00	11451.50	325.37***
Interaction of group & sex	3	40.83	13.61	0.41
Interaction of group & IQ	6	22.66	3.77	0.11
Interaction of sex & IQ	2	3.54	1.77	0.54
Interaction: group, sex, IQ	6	139.34	23.22	0.71
Experimental error	135	4837.23	32.49	

*<0.05 **<0.01 ***<0.001

Table III

MEANS OF STUDENTS CLASSIFIED ACCORDING TO GROUP, SEX AND IQ FOR THE RESULTS ON THE COMPREHENSION SUB-TEST

Level	Test Date	Total Immersion		Partial Immersion		French Controls	
		Male	Female	Male	Female	Male	Female
I	Pre	3.30	3.88	2.80	3.40	5.00	5.00
	Post	3.90	4.10	3.70	3.60	5.00	5.00
II	Pre	3.36	3.17	2.58	2.86	4.93	4.93
	Post	4.09	3.87	3.38	4.06	4.93	5.00
III	Pre	3.50	3.20	2.13	2.83	4.83	5.00
	Post	3.90	3.90	3.30	3.50	4.83	5.00

Table IV

FOUR-WAY ANOVA ON THE COMPREHENSION SCORES

Source of Variation	df (Num)	SS	MS	F
Main Effects:				
Dates tested: pre & post	1	8.43	8.43	49.23***
Group: program type	2	80.53	40.26	63.70***
Sex	1	0.87	0.87	1.38
IQ	2	1.55	0.77	1.22
Interaction Effects:				
Dates tested & group	2	4.37	2.18	12.79***
Dates tested & sex	1	0.08	0.08	0.50
Dates tested & IQ	2	0.33	0.16	0.97
Group & sex	2	0.72	0.36	0.57
Group & IQ	4	0.65	0.16	0.25
Sex & IQ	2	0.13	0.06	0.10
Dates tested, group, sex	2	0.18	0.09	0.53
Dates tested, group, IQ	4	0.28	0.07	0.40
Dates tested, sex, IQ	2	0.25	0.12	0.73
Group, sex, IQ	4	1.28	0.32	0.50
Dates tested, group, sex, IQ	4	0.34	0.08	0.49
Experimental Errors:				
Dates tested & nesting	90	15.41	0.17	
Nesting	90	56.88	0.63	

*<0.05 **<0.01 ***<0.001

Table V

MEANS FOR THE RESULTS ON THE GRAMMAR SUB-TEST

Level	Test Date	Total Immersion		Partial Immersion		French Controls	
		Male	Female	Male	Female	Male	Female
I	Pre	3.10	3.25	2.80	3.00	5.00	4.75
	Post	3.30	3.30	3.10	3.20	5.00	5.00
II	Pre	3.27	2.91	2.71	3.00	4.79	4.83
	Post	3.12	3.17	2.83	3.11	4.93	4.95
III	Pre	3.13	3.20	3.00	2.92	5.00	
	Post	3.20	3.00	2.80	3.30	4.83	5.00

Table VI

FOUR-WAY ANOVA ON THE GRAMMAR SOCRES

Source of Variation	df (Num)	SS	MS	F
Main Effects:				
Dates tested: pre & post	1	0.39	0.39	4.81*
Group: program type	2	112.30	56.15	231.07***
Sex	1	0.05	0.05	0.23
IQ	2	0.28	0.14	0.57
Interaction Effects:				
Dates tested & group	2	0.02	0.01	0.12
Dates tested & sex	1	0.02	0.02	0.33
Dates tested & IQ	2	0.04	0.02	0.28
Group & sex	2	0.64	0.32	1.33
Group & IQ	4	0.48	0.12	0.50
Sex & IQ	2	0.04	0.02	0.92
Dates tested, group, sex	2	0.07	0.03	0.47
Dates tested, group, IQ	4	0.17	0.04	0.52
Dates tested, sex, IQ	2	0.97	0.04	0.59
Group, sex, IQ	4	0.33	0.08	0.34
Dates tested, group, sex, IQ	4	0.46	0.11	1.40
Experimental Errors:				
Dates tested & nesting	90	7.39	0.08	
Nesting	90	21.86	0.24	

*<0.05 **<0.01 ***<0.001

Table VII

MEANS FOR THE RESULTS ON THE ENUNCIATION SUB-TEST

Level	Test Date	Total Immersion		Partial Immersion		French Controls	
		Male	Female	Male	Female	Male	Female
I	Pre	3.50	3.75	3.10	3.60	5.00	5.00
	Post	4.20	4.10	3.90	3.80	5.00	5.00
II	Pre	3.55	3.42	3.04	3.55	4.86	4.94
	Post	4.00	3.88	3.58	3.89	5.00	5.00
III	Pre	3.63	3.60	3.25	3.25	5.00	4.80
	Post	3.60	3.90	3.80	3.90	5.00	5.00

Table VIII

FOUR-WAY ANOVA ON THE ENUNCIATION SCORES

Source of Variation	df (Num)	SS	MS	F
Main Effects:				
Dates tested: pre & post	1	3.82	3.82	41.17***
Group: program type	2	55.36	27.68	107.19***
Sex	1	0.21	0.21	0.83
IQ	2	0.41	0.20	0.80
Interaction Effects:				
Dates tested & group	2	1.18	0.59	6.36**
Dates tested & sex	1	0.05	0.05	0.59
Dates tested & IQ	2	0.03	0.01	0.18
Group & sex	2	0.35	0.17	0.67
Group & IQ	4	0.25	0.06	0.24
Sex & IQ	2	0.07	0.03	0.14
Dates tested, group, sex	2	0.27	0.13	1.46
Dates tested, group, IQ	4	0.54	0.13	1.47
Dates tested, sex, IQ	2	0.31	0.15	1.69
Group, sex, IQ	4	0.42	0.10	0.41
Dates tested, group, sex, IQ	4	0.04	0.01	0.11
Experimental Errors:				
Dates tested & nesting	90	8.35	0.09	
Nesting	90	23.24	0.25	

*<0.05 **<0.01 ***<0.001

Table IX

MEANS FOR THE RESULTS ON THE RHYTHM AND INTONATION SUB-TEST

Level	Test Date	Total Immersion		Partial Immersion		French Controls	
		Male	Female	Male	Female	Male	Female
I	Pre	3.50	3.75	3.30	3.70	5.00	5.00
	Post	4.20	3.90	4.00	4.00	5.00	5.00
II	Pre	3.55	3.76	3.38	3.46	4.93	5.00
	Post	4.05	4.08	3.75	4.00	5.00	5.00
III	Pre	3.75	3.60	3.00	3.33	5.00	5.00
	Post	3.80	4.20	3.80	3.90	5.00	5.00

Table X

FOUR-WAY ANOVA ON THE RHYTHM AND INTONATION SCORES

Source of Variation	df (Num)	SS	MS	F
Main Effects:				
Dates tested: pre & post	1	4.22	4.22	61.01***
Group: program type	2	52.78	26.39	114.26***
Sex	1	0.20	0.20	0.87
IQ	2	0.22	0.11	0.48
Interaction Effects:				
Dates tested & group	2	2.01	1.00	14.56***
Dates tested & sex	1	0.01	0.01	0.15
Dates tested & IQ	2	0.00	0.00	0.03
Group & sex	2	0.18	0.09	0.40
Group & IQ	4	0.29	0.07	0.32
Sex & IQ	2	0.02	0.01	0.04
Dates tested, group, sex	2	0.15	0.07	1.12
Dates tested, group, IQ	4	0.41	0.10	1.50
Dates tested, sex, IQ	2	0.28	0.14	2.04
Group, sex, IQ	4	0.08	0.02	0.08
Dates tested, group, sex, IQ	4	0.41	0.10	1.48
Experimental Errors:				
Dates tested & nesting	90	6.23	0.06	
Nesting	90	20.78	0.23	

*<0.05 **<0.01 ***<0.001

Table XI

MEANS FOR THE RESULTS ON THE VOCABULARY SUB-TEST

Level	Test Date	Total Immersion		Partial Immersion		French Controls	
		Male	Female	Male	Female	Male	Female
I	Pre	3.10	3.83	2.80	3.40	5.00	5.00
	Post	3.80	3.80	3.60	3.60	5.00	5.00
II	Pre	3.36	3.00	2.58	3.05	4.93	5.00
	Post	3.50	3.67	3.17	3.50	5.00	5.00
III	Pre	3.50	3.40	2.38	2.92	5.00	5.00
	Post	3.40	3.80	3.00	3.60	5.00	5.00

Table XII

FOUR-WAY ANOVA ON THE VOCABULARY SCORES

Source of Variation	df (Num)	SS	MS	F
Main Effects:				
Dates tested: pre & post	1	3.14	3.14	22.80***
Group: program type	2	93.59	46.79	93.83***
Sex	1	1.29	1.29	2.60
IQ	2	0.99	0.49	0.99
Interaction Effects:				
Dates tested & group	2	1.73	0.87	6.29**
Dates tested & sex	1	0.03	0.03	0.24
Dates tested & IQ	2	0.00	0.00	0.00
Group & sex	2	1.07	0.53	1.07
Group & IQ	4	0.85	0.21	0.42
Sex & IQ	2	0.10	0.05	0.10
Dates tested, group, sex	2	0.18	0.09	0.68
Dates tested, group, IQ	4	0.18	0.04	0.34
Dates tested, sex, IQ	2	0.58	0.29	2.13
Group, sex, IQ	4	0.54	0.13	0.27
Dates tested, group, sex, IQ	4	0.49	0.12	0.90
Experimental Errors:				
Dates tested & nesting	90	12.39	0.13	
Nesting	90	44.88	0.49	

*<0.05 **<0.01 ***<0.001

Table XIII

MEANS FOR THE RESULTS ON THE FLUENCY SUB-TEST

Level	Test Date	Total Immersion		Partial Immersion		French Controls	
		Male	Female	Male	Female	Male	Female
I	Pre	3.60	3.75	3.00	3.40	5.00	4.75
	Post	3.80	3.90	3.40	3.50	5.00	5.00
II	Pre	3.55	3.13	2.83	3.32	4.93	5.00
	Post	3.64	3.71	3.08	3.56	5.00	5.00
III	Pre	3.75	3.60	2.25	3.25	5.00	4.90
	Post	3.60	3.60	3.00	3.60	5.00	5.00

Table XIV

FOUR-WAY ANOVA ON THE FLUENCY SCORES

Source of Variation	df (Num)	SS	MS	F
Main Effects:				
Dates tested: pre & post	1	1.28	1.28	10.75**
Group: program type	2	85.20	42.60	105.99***
Sex	1	0.78	0.78	1.94
IQ	2	0.36	0.36	0.89
Interaction Effects:				
Dates tested & group	2	0.58	0.29	2.43
Dates tested & sex	1	0.00	0.00	0.02
Dates tested & IQ	2	0.01	0.00	0.07
Group & sex	2	2.26	1.13	2.81
Group & IQ	4	0.75	0.19	0.47
Sex & IQ	2	0.03	0.01	0.04
Dates tested, group, sex	2	0.29	0.14	1.21
Dates tested, group, IQ	4	0.56	0.14	1.19
Dates tested, sex, IQ	2	0.07	0.03	0.29
Group, sex, IQ	4	0.85	0.21	0.53
Dates tested, group, sex, IQ	4	0.13	0.03	0.28
Experimental Errors:				
Dates tested & nesting	90	10.70	0.11	
Nesting	90	36.17	0.40	

*<0.05 **<0.01 ***<0.001

Table XV

MEANS FOR THE TEST DE RENDEMENT EN FRANCAIS

Level	Test Date	Total Immersion		Partial Immersion		French Controls	
		Male	Female	Male	Female	Male	Female
I	Pre	19.60	22.50	19.20	24.00	42.67	45.00
	Post	28.40	27.20	33.20	27.60	66.00	54.00
II	Pre	18.36	15.40	14.17	17.60	43.71	48.00
	Post	22.25	21.00	17.33	20.60	48.57	56.40
III	Pre	21.00	15.20	15.60	14.00	42.00	34.80
	Post	23.60	16.40	17.60	20.80	41.50	43.50

Table XVI

FOUR-WAY ANOVA ON THE SCORES OF THE TEST DE RENDEMENT EN FRANCAIS

Source of Variation	df (Num)	SS	MS	F
Main Effects:				
Dates tested: pre & post	1	1466.35	1466.35	37.95***
Group: program type	2	21468.10	10734.05	127.76***
Sex	1	71.26	71.26	0.84
IQ	2	1571.04	785.52	9.35**
Interaction Effects:				
Dates tested & group	2	131.87	65.94	1.71
Dates tested & sex	1	1.15	1.15	0.02
Dates tested & IQ	2	598.30	299.15	7.74
Group & sex	2	105.11	52.56	0.63
Group & IQ	4	426.02	106.50	1.27
Sex & IQ	2	205.69	102.84	1.22
Dates tested, group, sex	2	66.81	33.40	0.86
Dates tested, group, IQ	4	231.21	57.80	1.50
Dates tested, sex, IQ	2	56.90	28.45	0.73
Group, sex, IQ	4	662.15	156.54	1.97
Dates tested, group, sex, IQ	4	67.27	16.82	0.44
Experimental Errors:				
Dates tested & nesting	87	3361.26	38.63	
Nesting	87	7309.45	84.01	

*<0.05 **<0.01 ***<0.001

Table XVII

MEANS FOR THE RESULTS ON THE PARAGRAPH MEANING SUB-TEST

Level	Test Date	Total Immersion		Partial Immersion		English Controls	
		Male	Female	Male	Female	Male	Female
I	Pre	38.40	30.25	42.00	36.00	26.60	34.80
	Post	42.20	37.00	44.60	42.40	35.80	37.60
II	Pre	33.27	32.10	25.42	28.18	29.00	25.23
	Post	33.73	33.08	28.33	32.70	29.73	28.39
III	Pre	29.50	19.50	17.00	23.00	17.00	24.75
	Post	26.60	27.20	20.80	25.20	19.67	24.00

Table XVIII

FOUR-WAY ANOVA ON THE PARAGRAPH MEANING SCORES

Source of Variation	df (Num)	SS	MS	F
Main Effects:				
Dates tested: pre & post	1	440.18	440.18	19.36***
Group: program type	2	567.75	283.88	2.59
Sex	1	9.05	9.05	0.08
IQ	2	7140.10	3570.05	32.57***
Interaction Effects:				
Dates tested & group	2	4.66	2.33	0.10
Dates tested & sex	1	35.30	35.30	1.55
Dates tested & IQ	2	145.87	72.94	3.21*
Group & sex	2	423.51	211.75	1.93
Group & IQ	4	601.71	150.43	1.37
Sex & IQ	2	181.00	90.50	0.83
Dates tested, group, sex	2	128.46	64.23	2.83
Dates tested, group, IQ	4	34.85	8.71	0.38
Dates tested, sex, IQ	2	13.12	6.56	0.28
Group, sex, IQ	4	479.52	119.88	1.09
Dates tested, group, sex, IQ	4	144.78	36.20	1.59
Experimental Errors:				
Dates tested & nesting	103	2342.19	22.73	
Nesting	103	11288.50	109.59	

*<0.05 **<0.01 ***<0.001

Table XIX

MEANS FOR THE RESULTS ON THE LANGUAGE USAGE SUB-TEST

Level	Test Date	Total Immersion		Partial Immersion		English Controls	
		Male	Female	Male	Female	Male	Female
I	Pre	23.80	22.75	25.20	21.60	18.40	22.60
	Post	20.40	21.60	24.40	23.00	22.20	21.60
II	Pre	19.91	19.73	17.00	18.91	17.73	18.69
	Post	18.82	19.83	17.08	18.80	18.36	19.00
III	Pre	17.50	14.50	16.75	16.33	14.33	14.00
	Post	19.20	14.60	15.60	18.40	14.00	18.50

Table XX

FOUR-WAY ANOVA ON THE LANGUAGE USAGE SCORES

Source of Variation	df (Num)	SS	MS	F
Main Effects:				
Dates tested: pre & post	1	10.98	10.98	1.17
Group: program type	2	67.18	33.59	1.60
Sex	1	0.76	0.76	0.03
IQ	2	1169.59	584.79	27.90***
Interaction Effects:				
Dates tested & group	2	21.04	10.52	1.12
Dates tested & sex	1	4.14	4.14	0.43
Dates tested & IQ	2	24.59	12.30	1.31
Group & sex	2	65.08	32.54	1.55
Group & IQ	4	67.54	16.88	0.81
Sex & IQ	2	19.12	9.56	0.46
Dates tested, group, sex	2	3.65	1.83	0.19
Dates tested, group, IQ	4	21.57	5.39	0.57
Dates tested, sex, IQ	2	3.91	1.95	0.20
Group, sex, IQ	4	115.70	28.93	1.38
Dates tested, group, sex, IQ	4	82.95	20.74	2.20
Experimental Errors:				
Dates tested & nesting	104	979.57	9.41	
Nesting	104	2180.06	20.96	

*<0.05 **<0.01 ***<0.001

Table XXI

MEANS FOR THE RESULTS ON THE ARITHMETIC CONCEPTS SUB-TEST

Level	Test Date	Total Immersion		Partial Immersion		English Controls	
		Male	Female	Male	Female	Male	Female
I	Pre	20.60	13.75	21.75	19.33	22.80	22.20
	Post	27.20	21.00	27.20	26.00	29.00	27.80
II	Pre	15.50	15.45	17.86	15.38	16.09	14.08
	Post	19.00	19.83	19.18	20.60	27.73	18.54
III	Pre	14.25	10.75	14.50	11.67	14.00	11.05
	Post	20.00	14.60	13.40	15.40	17.33	15.50

Table XXII

FOUR-WAY ANOVA ON THE ARITHMETIC CONCEPTS SCORES

Source of Variation	df (Num)	SS	MS	F
Main Effects:				
Dates tested: pre & post	1	916.09	916.09	80.26***
Group: program type	2	59.77	29.88	0.61
Sex	1	228.46	228.46	4.67*
IQ	2	2138.88	1069.44	21.85***
Interaction Effects:				
Dates tested & group	2	13.92	6.96	0.61
Dates tested & sex	1	1.70	1.70	0.14
Dates tested & IQ	2	67.60	33.80	2.96
Group & sex	2	19.01	9.50	0.19
Group & IQ	4	176.99	44.25	0.47
Sex & IQ	2	44.46	22.23	0.45
Dates tested, group, sex	2	5.49	2.74	0.24
Dates tested, group, IQ	4	22.51	5.63	0.49
Dates tested, sex, IQ		3.13	1.56	0.13
Group, sex, IQ	4	88.18	22.04	0.90
Dates tested, group, sex, IQ	4	12.18	3.05	0.27
Experimental Errors:				
Dates tested & nesting	88	1004.46	11.41	
Nesting	88	4307.07	48.94	

*<0.05 **<0.01 ***<0.001

Table XXIII

PRE-TEST ONE-WAY ANOVAS ON THE CONCEPT "MYSELF"

Trait	Total Immersion	Partial Immersion	English Canadian Controls	df	F
1. strong...weak	5.45	5.28	4.71	2,120	3.22*
2. friendly...unfriendly	6.05	6.12	5.67	2,120	1.94
3. industrious...lazy	4.94	4.77	4.42	2,121	1.04
4. happy...sad	6.05	6.02	5.42	2,120	3.29*
5. pleasant...unpleasant	5.68	5.60	5.57	2,120	0.10
6. kind...mean	5.73	5.74	5.56	2,122	0.38
7. interesting...boring	5.15	5.19	4.45	2,121	3.68*
8. clean...dirty	5.76	6.00	5.67	2,120	0.63
9. funny...serious	4.00	4.35	4.02	2,121	0.42
10. unselfish...selfish	4.60	5.28	5.30	2,121	2.43
11. lenient...serious	4.63	4.29	4.03	2,117	1.59
12. successful...unsuccessful	5.82	5.60	4.91	2,121	5.34**

1. The first term of each trait has a rating of (7); the second, a rating of (1).
2. The symbol * indicates significance below the .05 level of confidence; the symbol **, below the .01 level.

Table XXIV

POST-TEST ONE-WAY ANOVAS ON THE CONCEPT "MYSELF"

Trait	Total Immersion	Partial Immersion	English Canadian Controls	df	F
1. strong...weak	4.37	4.00	3.52	2,123	5.15**
2. friendly...unfriendly	6.07	5.51	5.73	2,123	2.21
3. industrious...lazy	3.88	3.72	3.27	2,123	1.55
4. happy...sad	6.21	5.88	5.48	2,123	3.08*
5. pleasant...unpleasant	5.65	5.37	5.03	2,123	2.38
6. kind...mean	5.48	5.56	5.33	2,123	1.78
7. interesting...boring	5.33	4.79	4.38	2,123	5.81**
8. clean...dirty	5.93	5.67	5.70	2,123	0.57
9. funny...serious	2.88	3.53	3.32	2,123	1.59
10. unselfish...selfish	4.67	4.07	3.70	2,123	0.59
11. lenient...serious	3.58	3.02	3.45	2,123	2.10
12. successful...unsuccessful	5.63	5.33	4.88	2,123	2.89

1. The first term of each trait has a rating of (7); the second, a rating of (1).
2. The symbol * indicates significance below the .05 level of confidence; the symbol **, below the .01 level.

Table XXV

PPZ-TEST ONE-WAY ANOVAS ON THE CONCEPT "ENGLISH CANADIANS"

Trait	Total Immersion	Partial Immersion	English Canadian Controls	df	F
1. strong...weak	5.42	4.81	4.69	2,121	3.95*
2. friendly...unfriendly	5.34	5.19	5.60	2,119	1.14
3. industrious...lazy	4.92	5.32	5.06	2,121	0.77
4. happy...sad	5.26	5.32	5.02	2,122	0.76
5. pleasant...unpleasant	5.62	5.62	5.27	2,120	1.08
6. kind...mean	5.07	5.41	5.12	2,122	0.48
7. interesting...boring	5.26	5.47	4.90	2,119	1.90
8. clean...dirty	4.82	5.16	4.93	2,122	0.55
9. funny...serious	3.86	4.46	3.48	2,119	4.54*
10. unselfish...selfish	3.92	4.86	4.30	2,121	4.96**
11. lenient...serious	4.18	4.04	4.17	2,115	0.11
12. successful...unsuccessful	5.43	5.27	5.06	2,123	0.66

1. The first term of each trait has a rating of (7); the second, a rating of (1).
2. The symbol * indicates significance below the .05 level of confidence; the symbol **, below the .01 level.

Table XXVI

POST-TEST ONE-WAY ANOVAS ON THE CONCEPT "ENGLISH CANADIANS"

Trait	Total Immersion	Partial Immersion	English Canadian Controls	df	F
1. strong...weak	4.00	4.12	3.95	2,123	0.24
2. friendly...unfriendly	5.33	5.30	5.28	2,123	0.02
3. industrious...lazy	3.98	4.05	3.60	2,123	1.31
4. happy...sad	5.36	5.12	4.75	2,123	4.46*
5. pleasant...unpleasant	5.12	5.30	5.10	2,123	0.44
6. kind...mean	4.98	5.07	4.70	2,123	1.28
7. interesting...boring	5.07	4.95	4.30	2,123	4.85*
8. clean...dirty	5.21	5.18	4.75	2,123	1.69
9. funny...serious	2.70	3.07	3.10	2,123	1.35
10. unselfish...selfish	3.26	3.28	3.42	2,123	0.90
11. lenient...serious	3.28	3.23	2.67	2,123	6.83**
12. successful...unsuccessful	5.44	5.12	5.05	2,123	0.96

1. The first term of each trait has a rating of (7); the second, a rating of (1).
2. The symbol * indicates significance below the .05 level of confidence; the symbol **, below the .01 level.

Table XXVII

PRE-TEST ONE-WAY ANOVAS ON THE CONCEPT "FRENCH CANADIANS"

Trait	Total Immersion	Partial Immersion	English Canadian Controls	df	F
1. strong...weak	4.42	4.23	4.13	2,121	0.28
2. friendly...unfriendly	4.55	4.53	3.86	2,121	1.98
3. industrious...lazy	3.52	4.72	4.16	2,121	5.41**
4. happy...sad	4.78	5.13	4.80	2,119	0.90
5. pleasant...unpleasant	4.11	4.76	4.37	2,121	1.48
6. kind...mean	4.36	5.21	4.18	2,120	4.85**
7. interesting...boring	4.00	4.86	4.16	2,119	3.02
8. clean...dirty	3.71	4.18	4.02	2,121	0.78
9. funny...serious	4.26	4.00	3.93	2,121	0.39
10. unselfish...selfish	3.86	4.04	4.02	2,120	0.13
11. lenient...serious	3.76	3.92	4.25	2,118	1.59
12. successful...unsuccessful	4.00	4.88	4.46	2,122	2.89

1. The first term of each trait has a rating of (7); the second, a rating of (1).
2. The symbol * indicates significance below the .05 level of confidence; the symbol **, below the .01 level.

Table XXVIII

POST-TEST ONE-WAY ANOVAS ON THE CONCEPT "FRENCH CANADIANS"

Trait	Total Immersion	Partial Immersion	English Canadian Controls	df	F
1. strong...weak	3.35	3.60	3.25	2,123	0.73
2. friendly...unfriendly	4.35	4.74	4.58	2,123	0.63
3. industrious...lazy	2.95	3.58	3.30	2,123	1.93
4. happy...sad	4.84	5.33	4.78	2,123	1.92
5. pleasant...unpleasant	4.61	4.77	4.43	2,123	0.65
6. kind...mean	4.42	5.02	4.28	2,123	3.28*
7. interesting...boring	4.12	4.84	4.20	2,123	3.06
8. clean...dirty	4.21	4.72	4.23	2,123	1.77
9. funny...serious	3.02	2.77	3.10	2,123	0.62
10. unselfish...selfish	2.74	3.39	3.02	2,123	2.52
11. lenient...serious	3.05	2.70	2.72	2,123	1.01
12. successful...unsuccessful	4.07	5.02	4.58	2,123	4.71*

1. The first term of each trait has a rating of (7); the second, a rating of (1).
2. The symbol * indicates significance below the .05 level of confidence; the symbol **, below the .01 level.

Table XXIX

PRE-TEST ONE-WAY ANOVAS ON THE CONCEPT "EUROPEAN FRENCH"

Trait	Total Immersion	Partial Immersion	English Canadian Controls	df	F
1. strong...weak	4.58	4.62	4.95	2,122	0.72
2. friendly...unfriendly	5.13	5.46	5.21	2,121	0.61
3. industrious...lazy	4.94	5.05	4.79	2,120	0.32
4. happy...sad	4.68	5.46	5.21	2,121	3.47*
5. pleasant...unpleasant	4.89	5.44	5.05	2,121	1.73
6. kind...mean	4.89	4.93	5.05	2,120	0.14
7. interesting...boring	4.55	4.79	5.14	2,121	1.30
8. clean...dirty	4.68	5.12	5.09	2,121	1.92
9. funny...serious	3.13	3.76	3.53	2,119	1.50
10. unselfish...selfish	4.60	4.60	4.69	2,120	0.05
11. lenient...serious	3.59	3.67	3.57	2,116	0.05
12. successful...unsuccessful	4.95	5.07	5.12	2,121	0.17

1. The first term of each trait has a rating of (7); the second, a rating of (1).
2. The symbol * indicates significance below the .05 level of confidence; the symbol **, below the .01 level.

Table XXX

POST-TEST ONE-WAY ANOVAS ON THE CONCEPT "EUROPEAN FRENCH"

Trait	Total Immersion	Partial Immersion	English Canadian Controls	df	F
1. strong...weak	3.51	3.72	3.00	2,123	3.01
2. friendly...unfriendly	4.91	5.70	4.73	2,123	5.16**
3. industrious...lazy	3.44	4.21	3.75	2,123	2.80
4. happy...sad	5.40	5.63	5.03	2,123	2.18
5. pleasant...unpleasant	5.05	5.26	4.83	2,123	1.23
6. kind...mean	5.16	5.16	4.73	2,123	1.35
7. interesting...boring	4.84	5.23	4.90	2,123	0.87
8. clean...dirty	5.07	5.46	4.98	2,123	1.52
9. funny...serious	2.78	2.81	2.95	2,123	0.79
10. unselfish...selfish	4.46	3.63	3.40	2,123	0.31
11. lenient...serious	2.84	2.42	3.05	2,123	2.55
12. successful...unsuccessful	5.02	5.23	4.50	2,123	2.78

1. The first term of each trait has a rating of (7); the second, a rating of (1).
2. The symbol * indicates significance below the .05 level of confidence; the symbol **, below the .01 level.

Table XXXI

PRE-TEST ONE-WAY ANOVAS ON THE QUESTIONNAIRE STATEMENTS

Statements	Total Immersion	Partial Immersion	English Canadian Controls	df	F
1. FC's[1] contribute to the richness of our society.	3.55	4.16	3.34	2,121	1.85
2. The more I have to do with FC's, the less I want to be able to speak their language.	1.61	1.23	2.26	2,121	2.95
3. FC's are not very democratic in politics and philosophy.	3.11	2.72	2.47	2,120	1.15
4. FC's religious faith is a positive force in this modern world.	2.87	3.14	3.21	2,121	0.37
5. FC's have little reason to be proud of their race and traditions.	2.71	2.51	2.49	2,121	0.11
6. FC's are more likely to look upon family members as a source of income.	3.16	2.63	2.76	2,120	0.93

1. The abbreviation "FC" designates the term "French Canadian".
2. For the scale on each statement, total agreement corresponds to a score of (7); total disagreement, to a score of (1).
3. The symbol * indicates a p significant below the .05 level of confidence; the symbol **, below the .01 level.

Table XXXI (Cont.)

Statements	Total Immersion	Partial Immersion	English Canadian Controls	df	F
7. FC's are very dependable in their work.	3.84	4.09	4.32	2,121	0.70
8. Our children have much of value to learn by associating with FC playmates.	5.16	5.86	4.70	2,121	4.82**
9. We can learn better ways of cooking, serving food & entertaining from FC's.	4.15	4.98	4.35	2,122	1.97
10. FC's are generous and hospitable to strangers.	4.15	4.23	4.21	2,122	0.02
11. I would be quite willing to work for an FC employer.	4.49	5.23	4.90	2,121	1.42
12. Social-recreational clubs would be less enjoyable if both Fr. and Eng. belonged.	2.33	2.33	2.44	2,123	0.04

Table XXXII

POST-TEST ONE-WAY ANOVAS ON THE QUESTIONNAIRE STATEMENTS

Statements	Total Immersion	Partial Immersion	English Canadian Controls	df	F
1. FC's[1] contribute to the richness of our society.	3.81	4.35	4.08	2,123	0.92
2. The more I have to do with FC's, the less I want to be able to speak their language.	2.42	1.84	2.50	2,123	2.00
3. FC's are not very democratic in politics and philosophy.	3.79	3.30	3.40	2,123	0.93
4. FC's religious faith is a positive force in this modern world.	3.79	3.93	4.40	2,123	1.95
5. FC's have little reason to be proud of their race and traditions.	3.54	2.72	3.08	2,123	1.68
6. FC's are more likely to look upon family members as a source of income.	3.35	3.56	3.45	2,123	0.19

1. The abbreviation "FC" designates the term "French Canadian".
2. For the scale on each statement, total agreement corresponds to a score of (7); total disagreement, to a score of (1).
3. The symbol * indicates a p significant below the .05 level of confidence; the symbol **, below the .01 level.

Table XXXII (Cont.)

Statements	Total Immersion	Partial Immersion	English Canadian Controls	df	F
7. FC's are very dependable in their work.	4.21	4.93	4.45	2,123	2.33
8. Our children have much of value to learn by associating with FC playmates.	4.95	5.63	5.58	2,123	2.16
9. We can learn better ways of cooking, serving food & entertaining from FC's.	4.33	4.86	4.83	2,123	1.18
10. FC's are generous and hospitable to strangers.	3.95	4.28	4.33	2,123	0.66
11. I would be quite willing to work for an FC employer.	4.77	5.33	5.23	2,123	1.02
12. Social-recreational clubs would be less enjoyable if both Fr. and Eng. belonged.	2.95	2.93	3.23	2,123	0.31

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